BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

FCC 95-284

In the Matter of	)	
	)	**CC Docket No. 95-116**
Number Portability	)	**RM 8535**

COMMENTS OF
AMERICA'S CARRIERS TELECOMMUNICATION ASSOCIATION ("ACTA")

America's Carriers Telecommunication Association ("ACTA"), by its attorneys, submits its initial comments in the referenced proceeding. ACTA is a national trade association representing both facilities-based and resale interexchange carriers, operator service providers and others interested in promoting and advancing the more rapid and lasting establishment of true competition in the telecommunications marketplace. ACTA's membership has evolved with the evolution of the telecommunications industry itself and is positioning its membership to be prepared for the next step in the evolution of the marketplace - prying open the tightly sealed and vigorously protected monopoly of the local exchange.

SUMMARY OF COMMENTS

Because of the number of discreet issues posed in the rulemaking, it is impossible for ACTA to present a meaningful summary of its comments which would be shorter in length or would provide a substantive summary of its views. Hence, a waiver of the summary requirement for submissions in excess of ten pages is requested. In lieu of a summary, ACTA has provided its comments in a discreet manner by organizing its comments using the same subdivisions used in the Notice of Proposed Rulemaking ("NPRM"), then posing the question presented in that subdivision and immediately supplying the answer or comment. ACTA submits that this format will go a long way in aiding the consideration and understanding of its comments.

LONG TERM NUMBER PORTABILITY POLICY ISSUES

Issues on Timing

> What is the feasibility, limitations, and costs of: (1) longer-term; and (2) interim number portability deployment; and (3) what issues are associated with a transition to a permanent number portability environment?[1]

ACTA believes that interim solutions to local number portability are obstructionist, costly and should not be considered. Interim number portability usually consists of some type of a call forwarding procedure whereby the number listed on the incumbent telco switch is call forwarded to another number on another carrier's switch. It is expected that there will be transmission loss on the patched together circuit which will translate to the user as inferior service. Number portability rests on the ability of a switch to translate one number to another. This is presently done with 800 number portability and can be done with local telephone numbers. The size of the universe makes this a much larger task that requires prudent policies and procedures from the NANP Administrator, but is not so difficult that interim measures be pursued at the risk of deflecting attention from prompt attainment of the real goal.

Issues On Service Provider Portability

> What is the relative importance of service provider portability to end users considering taking service from an alternative provider, and what is the relation of this factor to other potential deterrents to competitive entry into local service?

ACTA agrees with what it understands the position of the competitive access providers ("CAPs") to be. CAPs have argued that without ease in the transfer of telephone

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[1] The issue or question(s) as presented by the NPRM will be restated in block, single-space form with the answers or comments double-spaced.

numbers from one carrier to another, there will never be any real competition in the local exchange business. This view finds support in the present tactics of the RBOCs as regards this issue. The carrier that originates the call must have control of the number. With control of the number comes dial tone; from dial tone comes a billing record. It is critical for the CAPs and for ACTA members that begin to offer local and long distance service as a packaged service to have true number portability and not be forced into a system that is based on the present feeble attempts to make call forwarding look like number portability.

> Does existing number churn offer opportunities for competitive entry without service provider portability?

There is a growing demand for new numbers. The RBOCs state that this means that there is not the need for radical action today. In fact, it is just the opposite. There is a growing demand from subscribers for one-stop shopping. For a CAP or IXC (hereinafter collectively referred to as "ISP" for "Integrated Service Provider") to compete, it must be able to offer the same service that the RBOCs do. A market growth of just 6% per year is insufficient to sustain competition.

> Do different customer groupings exist in the value such groupings place on service provider portability?

Industry experience may vary but, in general, the answer to this question appears to be yes in the greatest number of cases. Telephone numbers can and do take on an emotional importance to both residential and commercial users alike, with slightly greater importance for commercial users. For example, ACTA understands from experiences shared by its members that MCI was not able to sell service into either Sheraton or American Express until 800 number portability became a reality. Based on a logic ACTA

believes would be used by most end users, Sheraton would not change their 800-325-3535 reservations number because of the advertising that it had invested in that number.

What is the significance of service provider portability on competition between wireline and wireless providers?

New wireless carriers are going to attract customers from existing wireline and cellular carriers. Individual and commercial users are going to want to retain their existing telephone numbers. If the numbers are not available for transfer to the new wireless carriers, it will be a serious barrier to the more rapid development of competition in terms of the local loop and will impede the use of wireless technology by existing companies wishing to become ISPs.

What is the current and future demand of wireless customers for portable wireless telephone numbers when changing to another wireless or to a wireline provider?

The present cellular carriers have a 50% compounded growth rate. It is predicted that the new PCS networks will have the same or higher growth rates. It has been estimated that wireless networks will carry over 30% of the traffic in just ten short years. There is no reason to believe that portable wireless telephone numbers will be any less important for these users than for users of conventional telephone service.

Issues on Service Portability

What is the demand for service portability?

Present users have not thought through the need for service portability because it has never been available. The customer is used to separate numbers for their main billing number, 800 numbers, WATS, etc. There will be a portion of the market that will want to retain separate numbers, but there will be others who will see the advantage of single

numbers. For the future, not today, there needs to be provisions made for service portability.

Does the lack of service portability inhibit growth of new services, like ISDN?

On a whole, ACTA does not believe so. ISDN service is a digital service. The designation of circuits for ISDN service would rely on the availability of fiber optic or conditioned copper cable.

What is the relative importance of service portability to end users when considering whether to switch providers?

ACTA believes that both commercial and residential customers have not understood what service portability offers and therefore have no opinion. However, it is clear that there are benefits to service portability and it should be included in the policies crafted for future use.

Should the FCC "encourage" or "mandate" service portability?

This is not a crucial issue for the new ISPs. The FCC should "encourage" the capability, but it is far more critical to have service provider portability first. There should be little real cost to either the network or the number pool that would prohibit service portability.

Issues on Location Portability

Defined as allowing an end user to keep its number whether moving across the block, across town, to another part of the state or across the nation (the type of capability being studied in the Seattle experiment), should the FCC "encourage" or "mandate" location portability?

There is location portability today. If a user remains within a serving central office and desires to move, the number may be transferred to the new location. Most customers

want to have location portability. Changing telephone numbers is very expensive for businesses and even for residential users. The creation of location portability, however, will have networking and call processing impacts. This capability may well mean the use of two numbers to complete a call, larger SS7 networks with all the incumbent SSPs and SCPs increasing overall network costs. From a marketing position, however, when customers talk about number portability, they really mean the ability to move to another location without changing their telephone numbers. This capability should have the highest priority.

Federal Preemption

Should the FCC merely "dominate" or outright "preempt" the regulation of number portability to ensure national uniform development of number portability?

The issues of number portability cut across state jurisdictions. The state regulatory commissions do not administer the North American Numbering Plan. The FCC is presently accepting proposals for creating a new national administrator. Because of the issues involved, it is imperative that the FCC preempt states from participating in this issue.

Does the potential impact of portability on competitive interstate telecommunications services mandate preemptive action by the FCC?

Yes.

Would the deployment of different number portability methods across the country serve the public interest?

Historically, calls have originated and terminated in different jurisdictions. The regulatory scheme was structured to accommodate disparate determinations of state and Federal issues. Today, technology has further blurred the already murky demarcation lines. It is going to be the originating carrier with its SS7 network capability that is going to search the database for the proper destination of the call. That database will have all the

local numbers in it as well as access to other databases throughout the nation. Having multiple state jurisdictions supervise this function is a prescription for disaster. There can only be one number portability scheme in the country.

What actions should the FCC take to expedite portability's implementation?

The RBOCs presently control the local telephone numbers through Bellcore. Number portability is a serious breech in their monopoly wall. They have no incentive to make this easy for their future competitors. The FCC must mandate an implementation date.

If mandated by the FCC, what is a realistic time frame by which to deploy portability?

Local number portability is technically feasible. The SS7 networks are robust enough to provide the lookup capability. There will have to be significant increases in both networking and computer capability, but all of this should take no more than 24 months. The FCC should mandate local number portability to be available on January 1, 1997.

Should the FCC set standards or allow industry to do so?

There are standards established now for the SS7 networks. These are working quite well. They should be expanded to include the additional requirements of local number portability. The FCC should not set the standards. The industry would quickly gridlock in opposing filings. In addition, the RBOCs would use this issue as an excuse to stall the process. Let the industry negotiate standards subject to FCC review and public comment.

Other Services Issues

Should the portability environment support operator services and 911 service as the FCC has tentatively concluded it should?

Number portability affects all services. 911 is a critical service that could be significantly augmented if number portability was a reality. The same can be said for Operator Services. The establishment of a framework for true portability should be the goal of any portability procedures. It might be that this has to be accomplished in phases, but it should be the overriding goal.

Issues on Call Processing Scenarios

Which carrier involved in processing a call should be responsible for querying the database?

There are two answers here. The first is that the originating service provider should have the responsibility of determining the destination of a local and intrastate and intraLATA call. This could also hold for interLATA calls, but the originating switch of the ISP could also be tasked with the responsibility of intra and interLATA database lookup.

At what point in time in the routing of the call should the database be queried?

The database should be queried at the time the call is originated.

What different burdens are placed on the relevant carriers from the three scenarios (TAP, OSP or N-1) for call processing?

The originating service provider has historically routed calls through the network. This function should continue in the portable world. Today, upon receipt of the dialed digits, the LEC "looks ahead" on its SS7 network to determine routing and destination. If by chance the terminating access provider was to be responsible for the lookup of the call's destination, that would mean that significant routing information would have to be

handed off to the end carrier, taking time and probably duplicating a portion of the lookup procedure used by the call origination LEC. This would add time to the completion of the call to say nothing of the cost.

What methods can reduce the number of database queries?

Routing the call from the origination LEC is the only way to reduce LIDB lookups.

What are the burdens on current SS7 networks and on future system signaling networks and what network modifications are required?

Predominantly, the operating parameters of today's SS7 network are capable of routing the calls. Since long distance calling represents only about 35% of all traffic, the networks today do not have the capacity to provide the service, but the problem is one of quantity, not quality or capability.

What are the impacts on transmission quality, call set-up time, and other quality considerations?

There should be virtually no discernable difference in the time for call setup given the speed of an SS7 network. These networks use fiber optic facilities, thus offering high quality transmission that will not be impacted with additional transactions placed on the networks.

Issues on Geographic Scope

Where should numbers be portable - local calling areas, particular area codes, state-wide, regionally, nationwide or some other area?

Local number portability should be available within the operating tandem area, or for smaller LECs, throughout their operating territory. It has never been envisioned that local telephone numbers would be made available throughout the country or move from one

telephone company's operating area to another, unless, of course there was an ISP in the same operating territory.

Issues on Architecture

What database architecture should be used?

The architectural model is already present in the SS7 networks already in existence.

Is the 800 database a useful model?

Yes, it is a useful model and ACTA believes that this 800 database model should be used as the design structure of a total translation model.

Is it technically feasible to have a single nationwide database or must there be several regional databases?

It is technically feasible. However, a nationwide database would be so large that it would make much more sense to have a distributed system on a regional basis for easier access, redundancy, enhanced call processing and call completion times by competing networks.

If regional, in what geographic areas should the databases operate?

Geography is not important here, network topology is.

Issues on Administration of Database(s)

Who should own the database(s)?

There is going to be a need for a "Federal Reserve Bank" for telephone numbers. The numbers will be created by the North American Numbering Plan Administrator which will initially be assigned to a specific carrier. The numbers will stay assigned to that carrier until a properly authorized request is accepted and the number transferred to another

carrier. No one will own the telephone numbers. The SS7 network should be owned and operated by an independent network established for this sole purpose.

How will database(s) be maintained and funded?

Each of the LIDB lookups will have a charge attached to it in the neighborhood of $0.0015 or less per transaction. This will more than fund the network, computer programing, maintenance and manpower.

What criteria should be used to select an administrator?

Competitive bidding without either the telephone companies or the long distance companies being able to bid. This needs to be an industry clearing house function that is paid for by call transaction.

What should the administrator's responsibilities be?

The NANP network should establish the procedures, policies and pricing that will enable true local number portability.

Issues on Costs

What are the costs to design, build and deploy a database solution for number portability?

It is not as expensive as one might expect, but it will be in the range of $100 million with most of that being used for network services from the long distance companies and network switching and computer equipment necessary to establish the network. The actual programming of the computers with the database, while time-consuming, is not that expensive.

How should costs be allocated between federal and state jurisdictions?

Costs should not be allocated between federal and state jurisdictions. The call originator should pay for LIDB access whether it is a local or long distance call.

How should these costs be recovered?

There is a cost to establish and run this network. The industry should establish a clearing house company for this purpose. That company should be a non-profit organization that has a zero balanced budget each operating year and recovers its own costs.

If LECs are mandated to implement portability should they be permitted to treat the costs as exogenous and thereby increase their rates?

Generally - no. One of the primary fears of the competitive industry is the ability of the RBOCs to use number portability as a barrier to entry either by stalling the process or by establishing the prices for the services. Prices should be set to recover costs, and the RBOCS and other LECs should have to pay the same as everybody else.

Should costs be shared between all carriers using the system or by competing providers of local service and their customers?

This process will not work unless the entire industry shares the costs. Number portability benefits all, eventually even the RBOCs. If the costs are split between local competitors, it will be used as an anticompetitive device to block new entrants from coming into the market.

INTERIM NUMBER PORTABILITY POLICY ISSUES

Issues on Interim Measures

Can these interim measures (RCF, DID, Tandem) be improved and, if so, at what costs?

ACTA believes that the tests being conducted on interim measures for number portability are not solving the problem. It is going to take two years to create an SS7 network robust enough to provide true portability. Investing in these interim measures slows down real potential progress.

How are the costs for interim measures best and most fairly recovered?

ACTA does not favor interim measures. It has no comment here but reserves comment until review of other comments submitted in this proceeding.

Do current practices by which the incumbent LECs charge per line charges impede competition and would a lowering of those charges allow the interim measures to become long term solutions?

Absolutely! And therein lies the problem. The interim measures were designed by the telephone companies. The costs were set extremely high. Even if they are reduced, they will be anti-competitive. However, the interim solutions are nothing but a stop gap measure by the telcos to slow down the process. These solutions use call forwarding. It requires two telephone numbers. Using two numbers automatically means a loss of transmission quality. Forcing this solution on their competitors makes them look like they have the good transmission quality and the new networks don't.

What alternative cost recovery methods exist?

Minor transaction fees.

TRANSITION ISSUES

Service Provider Portability. What are the estimated time frames to design, build, and deploy a system providing service provider portability?

ACTA believes that the solution to the service provider issue rests in the ability of the central office switches to "translate" a number that has been moved from one carrier to another. This, generally, means that there will have to be enhanced software made available from the manufacturers, most probably increased switch capacity in memory, and call processing times, as well as a substantial increase in the present SS-7 network capacities. All segments of the industry know how to do this. Both the manufacturers and networks are concurrently working towards the solution. It has little to do with the capabilities of the individual RBOCs except to act as obstructionist to the process.

What modifications to carriers' network billing and collection and other operating procedures and dialing plans are necessary to transition to service provider portability?

The telephone number is going to switch from one carrier to another. It will become the "property" of that carrier. The new carrier will bill the customer for its use. Present billing and collection procedures can be easily augmented to provide for this capability once the SS-7 network and switches have been upgraded.

Will the transferring wireless telephone numbers between wireline and wireless or wireless and wireless providers impose different burdens?

ACTA believes that it is important to realize that a telephone number is simply a location designation. It may be assigned to either a wireline or wireless location. The number itself imposes no burden. It is the assignment procedures and policies created by the NANP Administrator that determine the use of a number. Once a number is assigned

to one location or another, the network will utilize it in a normal way. There is no additional "burden" from one network to another.

> Location Portability. What are the estimated time frames to design, build, and deploy a system providing location portability?

Location portability requires further definition. If, by location portability, the Commission means the ability to "move" a number from one location to another within an operating tandem area of the local telco, then that ability should be relatively easy to provide. If, however, that number was to "move" outside that tandem area the translation process would be that much more complex and would have to await the completion of the complete translation model for number portability.

> What modifications to carriers' network billing and collection and other operating procedures and dialing plans are necessary to transition to location portability?

ACTA believes that the call originator should "look-up" the destination of the call. Once that is accomplished, they should be the ones who bill for the call if it is a "local" call. However, if that call is long distance, then the originating long distance carrier should bill and collect for it.

> What impact will users, the network, service providers, experience due to the dialing parties no longer being able to determine the charge for the call due to the dissolution of the association between telephone numbers and geographic locations which result from location portability?

ACTA believes that calls will be priced upon minutes of use rather than geographical location of the origination and termination of the call. There are a number of RBOCs that provide message sensitive service in much the same way that long distance is charged for. The same will most probably apply to local calling.

What effect will location portability have on operator services, directory assistance, enhanced services, rating for toll and interLATA calls and billing systems?

There should be little impact of these service providers because they bill on a transaction basis.

What additional costs would be incurred or benefits obtained by evolving to location portability from an intermediate step of service provider portability?

ACTA does not believe that service provider portability should be an interim step. The NANP configuration requires that all of the portability issues be solved at the same time. It is possible to introduce these solutions into the market in a phased sequence to enhance the speed of the network deployment, however, the procedures should be clearly defined to how these issues will be solved, for without such a solution, it represents a prime bottleneck to competition in the local exchange business.

PORTABILITY OF NON-GEOGRAPHIC NUMBERS

900/500/PCS N00[2]

Is the FCC's tentative conclusion that service provider portability for 900/500/PCS N00 is in the public interest?

ACTA believes that number portability is crucial for the benefits of the new services and networks that are being created today to become a reality to their customers. It is important that the responsibility of the "telephone number" be clearly understood. It is

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[2] The term "PCS" is used here generically as "a set of capabilities that allows some combination of personal mobility, terminal mobility, and service profile management." PCS N00 number portability includes 500 number portability. The INC uses this more general title of PCS N00 number portability toinclude other NPA codes. because it recognizes that PCS services may use NPA codes other than, or in addition to, the 500 NPA code. Ther term "PCS" or "personal communications services" as used here with respect to 500 numbers and the INC workshop should not be interpreted as the term "personal communications services" is defined in Part 24 of the Commission's rules. *See* 47 C.F.R. § 24.5 (1994).

and has always been a locator mechanism. Today, numbers exist in a virtual reality and do not need to be assigned to a terminal block to be real. If the "500" number group can be assigned to individuals in a non-geographic distribution, then all numbers can. It is vitally important that this country have the benefits of that portability. It should not even be an issue, and would not be if it wasn't being used as a barrier to entry.

If so, what are the monetary and non-monetary costs of making these numbers portable?

There will not be a separate cost to make those numbers portable. In fact, the 800 database model should facilitate their portability with little or no additional costs.

Should number portability for 900 and PCS N00 be mandated?

Yes.

Should service provider portability be included?

It is ACTA's belief that there can be no number portability without <u>service provider</u> portability being included.

Can the same database method and same database be used to give portability to these numbers?

It is ACTA's position that the same database model can be used.

Can the same database methods and database be used to provide service provider portability for these numbers?

Yes.

What are the estimated costs of designing, building, deploying and operating a 900 database?

ACTA cannot respond to this question.

Can the 800 database system be upgraded to handle 900 and, if so, at what costs?

It is ACTA's belief that the 800 database can be upgraded to include 900, however, it does not recommend doing so separately or in a different manner than is to be created for local number portability. One must be careful to solve the entire problem and not create future ones by taking an expedient course of action today.

Is AIN a less costly way to implement 900 portability?

Advanced Intelligent Network ("AIN") is the name the industry uses for an interactive network that permits such functions as number portability. It is, in fact, what is being created by solving problems such as number portability. It is not a service, product, or individual network. It is the sum total of all capabilities of all the networks. Therefore, to say that AIN can solve the number portability issue is at the same time, both right and wrong. Right in that it will be a function of AIN to provide the portability of numbers, but wrong in that it exists today to do so.

What is a realistic time table to implement a 900 portability system?

ACTA is concerned that 900 portability be created outside of a model that provides for all number portability. Certainly, using the 800 database model, 900 portability can be made portable relatively quickly. In fact, under a different NANP Administrator, ACTA believes that it would have been made available. The fact that it has been used in an anti-competitive manner reflects the unfortunate mix of "politics" with technology.

Should an industry group, and if so, which one, be directed by the FCC to develop an implementation plan?

The FCC should NOT develop an implementation. This should be the responsibility of the new NANP Administrator. This should be an independent entity that is funded by the entire industry and reports to the Federal Communications Commission.

500 PORTABILITY

Issues on 500 Portability

To what extent are LECs using AIN or other database technology to provide 500 access?

As stated previously, AIN is a composite of capabilities. Number portability is a capability of the network. Part of that capability is the 800 database that was prepared for 800 portability. That model is being used to provide portability of the "500" type numbers. But, it should be remembered that this series of numbers has never been used before and, thus, providing them as "virtual" numbers has been somewhat easier than when dealing with "in service" numbers.

What impact would PCS N00 service provider portability have on LEC networks.

ACTA believes that one number designation should not be treated any differently than another designation group. It should have no more or less impact on the network except to say that the amount of numbers in use within the country is growing at a significant rate. Therefore, there is an impact as quantity grows, but this impact should not be focused on one number group or another.

Can PCS N00 service provider portability be provided in a switched-based translation environment?

It is ACTA's belief that it can.

Will PCS N00 number portability lower prices and stimulate demand for PCS services?

Number portability stimulates demand. Demand and competition lower prices. Conversely, the lack of portability favors the entity which presently controls the most

marketshare. This, of course, means the very large carriers. If there is no number portability, there will be no competition.

What are the estimated costs of designing, deploying and operating a PCS N00 database?

ACTA does not know.

Can the 800 database system be upgraded to handle PCS N00 and, if so, at what costs?

Here again, it is ACTA's position that the portability of various number groups should not be considered in isolation but all together as one problem requiring a solution.

What are the advantages and costs of the proposed architectures and call flow scenarios set forth in the PCS N00 Portability Report?

ACTA does not know.

Should the administrator of the PCS N00 database be a neutral third party as the FCC has tentatively concluded?

Absolutely!

Should the FCC direct an industry group, and if so, which one, to develop an implementation plan for PCS N00 service provider portability?

ACTA believes that an industry group should be selected by competitive bid, with no industry groups able to participate in the bidding. The winning bidder would provide the functions of an NANP Administrator and be tasked with the solutions to problems such as number portability.

Is the estimated schedule of implementation in the PCS N00 Portability Report accurate or what alternative schedules should be considered?

ACTA does not know.

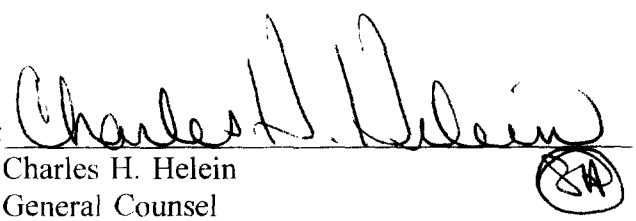
REGULATORY FLEXIBILITY ACT ISSUES

What is the impact on small business entities of the policies and rules which result from the FCC's consideration and determination of the issues presented?

For small ISPs, the decisions may well spell the difference between survival and elimination from the marketplace. For small business users and residential users, the policies adopted will mean the difference between the fruits of a truly competitive market or the "same old, same old" of dominant parceling out of services and innovation based on intra-corporate goals versus public need and demand.

Respectfully submitted,

AMERICA'S CARRIERS TELECOMMUNICATION ASSOCIATION

By: 
Charles H. Helein
General Counsel

Of Counsel:

Helein & Associates, P.C.
8180 Greensboro Drive, Suite 700
McLean, Virginia 22102
Telephone: (703) 714-1300
Facsimile: (703) 714-1330

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